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(54) DUST CORE AND ITS MANUFACTURING METHOD

(57)Abstract:

PROBLEM TO BE SOLVED: To provide a dust core composed of an Fe-Si-based magnetic powder which is higher in density than in the conventional examples.

SOLUTION: This dust core is obtained by press-molding magnetic powder coated with an insulating coating film and is composed mainly of Fe and Si. In this dust core, the Si content (X: mass%) and the density ratio (ρ/ρ_0 : %) that is

the ratio of the bulk density (ρ) of the dust core to the true density (ρ_0) of the magnetic powder are adjusted to satisfy $\rho/\rho_0 \geq 94-X(\%)$. According to the Si content, this high-density dust core is manufactured industrially by, for example, inter-die lubricating warm press molding, etc.

